

AMENDMENT TO THE CLAIMS

1. – 26. (Cancelled)

27. (New) A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprising, by means of weight percentages, more than 32 percent and not more than 45 percent  $P_2O_5$ , more than 0.5 percent and not more than 6 percent  $Li_2O$ , more than 5 percent and not more than 22 percent  $Na_2O$ , 6-30 percent  $Nb_2O_5$ , 0.5-10 percent  $B_2O_3$ , 0-35 percent  $WO_3$ , 0-14 percent  $K_2O$ , and 10-24 percent  $Na_2O + K_2O$ , wherein the sum of the oxides of P, Li, Na, Nb, B, W, and K is not less than 80 percent.

28. (New) The process of claim 1, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

29. (New) The process of claim 1, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

30. (New) The process of claim 29, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

31. (New) A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,

wherein the press-molding glass preform is a preform prepared by the process of claim 27.

32. (New) The process of claim 31, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of  $10^7$ - $10^8$  dPa·s.

33. (New) The process of claim 31, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than  $10^9$  dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of  $10^9$ - $10^{12}$  dPa·s.

34. (New) A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprised of phosphate glass comprising, by means of weight percentages, more than 0.5 percent and not more than 6 percent  $\text{Li}_2\text{O}$ , more than 5 percent and not more than 22 percent  $\text{Na}_2\text{O}$ , 0-14 percent  $\text{K}_2\text{O}$ , 10-24 percent  $\text{Na}_2\text{O} + \text{K}_2\text{O}$ , 6-30 percent  $\text{Nb}_2\text{O}_5$ , and not more than 45 percent  $\text{P}_2\text{O}_5$ , and exhibits a refractive index (nd) of 1.64-1.72, an Abbé number (vd) of 29-36, a sag temperature ( $T_s$ ) of not more than  $520^\circ\text{C}$ .

35. (New) The process of claim 34, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

36. (New) The process of claim 34, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

37. (New) The process of claim 36, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

38. (New) A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,

wherein the press-molding glass preform is a preform prepared by the process of claim 34.

39. (New) The process of claim 38, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of  $10^7$ - $10^8$  dPa·s.

40. (New) The process of claim 38, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than  $10^9$  dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of  $10^9$ - $10^{12}$  dPa·s.

41. (New) A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprised of phosphate glass comprising, by means of weight percentages, more than 0.5 percent and not more than 6 percent  $\text{Li}_2\text{O}$ , more than 5 percent and not more than 22 percent  $\text{Na}_2\text{O}$ , 0-14 percent  $\text{K}_2\text{O}$ , 10-24 percent  $\text{Na}_2\text{O} + \text{K}_2\text{O}$ , 6-30 percent  $\text{Nb}_2\text{O}_5$ , 0-35 percent  $\text{WO}_3$ , 0-5 percent  $\text{Al}_2\text{O}_3$ , and not less than 0 percent but less than 8 percent  $\text{TiO}_2$ , and exhibits a refractive index (nd) of 1.64-1.72, an Abbé number (vd) of 29-36, a sag temperature (Ts) of not more than 520°C.

42. (New) The process of claim 41, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

43. (New) The process of claim 41, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

44. (New) The process of claim 43, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

45. (New) A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,

wherein the press-molding glass preform is a preform prepared by the process of claim 41.

46. (New) The process of claim 45, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of  $10^7$ - $10^8$  dPa·s.

47. (New) The process of claim 45, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than  $10^9$  dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of  $10^9$ - $10^{12}$  dPa·s.

48. (New) A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform comprises, by means of weight percentages, more than 32 percent and not more than 45 percent  $P_2O_5$ , more than 0.5 percent and not more than 6 percent  $Li_2O$ , more than 5 percent and not more than 22 percent  $Na_2O$ , 6-30 percent  $Nb_2O_5$ , 0.5-10 percent  $B_2O_3$ , 0-35 percent  $WO_3$ , 0-14 percent  $K_2O$ , and 10-24 percent  $Na_2O + K_2O$ , 0-2 percent  $SiO_2$ , 0-5 percent  $Al_2O_3$ , not less than 0 percent but less than 8 percent  $TiO_2$ , 0-15 percent  $ZnO$ , 0-12 percent  $BaO$ , not less than 0 percent but less than 1 percent  $Sb_2O_3$ , and 0-1 percent  $SnO_2$ , wherein the sum of the oxides of P, Li, Na, Nb, B, W, K, Si, Al, Ti, Zn, Ba, Sb, and Sn is not less than 95 percent, and exhibits a refractive index (nd) of 1.64-1.72, an Abbé number (vd) of 29-36, a sag temperature ( $T_s$ ) of not more than 520°C.

49. (New) The process of claim 48, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

50. (New) The process of claim 48, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

51. (New) The process of claim 50, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

52. (New) A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,  
wherein the press-molding glass preform is a preform prepared by the process of claim 48.

53. (New) The process of claim 52, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of  $10^7$ - $10^8$  dPa·s.

54. (New) The process of claim 52, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than  $10^9$  dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of  $10^9$ - $10^{12}$  dPa·s.

55. (New) A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprised of phosphate glass comprising  $\text{Li}_2\text{O}$ ,  $\text{Na}_2\text{O}$ ,  $\text{Nb}_2\text{O}_5$ , and  $\text{B}_2\text{O}_3$  as essential components, and 0-2 percent  $\text{SiO}_2$  with a refractive index (nd) of 1.64-1.72, an Abbé number (vd) of 29-36, a sag

temperature (Ts) of not more than 520°C, and a liquidus temperature (LT) of not more than 900°C.

56. (New) The process of claim 55, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

57. (New) The process of claim 55, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

58. (New) The process of claim 57, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

59. (New) A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,  
wherein the press-molding glass preform is a preform prepared by the process of claim 55.

60. (New) The process of claim 59, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of  $10^7$ - $10^8$  dPa·s.

61. (New) The process of claim 59, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than  $10^9$  dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of  $10^9$ - $10^{12}$  dPa·s.

62. (New) A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprising, by means of weight percentage, not more than 45 percent P<sub>2</sub>O<sub>5</sub>, more than 0.5 percent but not

more than 6 percent  $\text{Li}_2\text{O}$ , not more than 22 percent  $\text{Na}_2\text{O}$ , not less than 6 percent  $\text{Nb}_2\text{O}_5$ , 0-35 percent  $\text{WO}_3$ , 0-14 percent  $\text{K}_2\text{O}$ , wherein the sum of the oxides of P, Li, Na, Nb, W, and K is not less than 80 percent, and exhibits a sag temperature ( $T_s$ ) of not more than  $520^\circ\text{C}$ , and a liquidus temperature (LT) of not more than  $900^\circ\text{C}$ .

63. (New) The process of claim 62, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

64. (New) The process of claim 62, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

65. (New) The process of claim 64, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

66. (New) A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,  
wherein the press-molding glass preform is a preform prepared by the process of claim 62.

67. (New) The process of claim 66, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of  $10^7$ - $10^8$  dPa·s.

68. (New) The process of claim 66, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than  $10^9$  dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of  $10^9$ - $10^{12}$  dPa·s.

69. (New) A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprising, by means of weight percentage, not more than 45 percent  $P_2O_5$ , more than 0.5 percent but not more than 6 percent  $Li_2O$ , not more than 22 percent  $Na_2O$ , not less than 6 percent  $Nb_2O_5$ , 0-35 percent  $WO_3$ , 0-14 percent  $K_2O$ , wherein the sum of the oxides of P, Li, Na, Nb, W, and K is not less than 80 percent, and exhibits a refractive index (nd) of not less than 1.64, and an Abbé number (vd) of not more than 36.

70. (New) The process of claim 69, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

71. (New) The process of claim 69, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

72. (New) The process of claim 71, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

73. (New) A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,  
wherein the press-molding glass preform is a preform prepared by the process of claim 69.

74. (New) The process of claim 73, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of  $10^7$ - $10^8$  dPa·s.

75. (New) The process of claim 73, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than  $10^9$  dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of  $10^9$ - $10^{12}$  dPa·s.